REMARKS

In the Final Office Action[1] mailed January 25, 2008 ("Office Action) the Examiner

rejected claims 1-9, 11, 13, 14, 16-19, 21-34, 36 and 38 as being unpatentable over

"Ad-hoc On-demand Distance Vector Routing" by Perkins et al. ("IEEE") in view of U.S.

Patent No. 7,177,652 to Hopper et al. ("Hopper"); and rejected claims 10, 12, 15, 20, 35,

and 37 as being unpatentable over IEEE and Hopper, and further in view of "Computer

Networks: A Systems Approach" by Peterson et al. ("Computer Networks").

Applicant amends claims 1-9, 11-16, 18, 19, 26-34, and 36-38, and cancels claim

25 without prejudice or disclaimer. Claims 1-24 and 26-38 are pending.

I. Information Disclosure Statement

Applicant respectfully requests that the Examiner consider the documents cited

by the Information Disclosure Statement filed on January 10, 2008 (i.e., before the

mailing date of the outstanding Final Office Action) and indicate that the documents

were considered by making appropriate notations on the Form PTO/SB/08 submitted

therewith. Applicant requests that a copy of the notated Form PTO/SB/08 be sent with

the next Patent Office communication.

II. Rejection of claims 1-9, 11, 13, 14, 16-19, 21-24, 26-34, 36 and 38 as being unpatentable over IEEE and Hopper

Applicant respectfully traverses the rejection of claims 1-9, 11, 13, 14, 16-19, 21-

24, 26-34, 36 and 38 as being unpatentable over IEEE in view of Hopper. IEEE and

Hopper do not disclose or render obvious these claims, as amended.

---

[1] The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

For example, independent claim 1 recites a method including, among other features

> identifying a first sub-network of the plurality of machines that are within direct communication range of the respective machine and each other . . .
>
> storing . . . information identifying and associating each of the machines in the first sub-network;
>
> identifying a second sub-network of the plurality of machines that are in direct communication range of one or more of the machines in the first sub network and each other, the second sub-network including at least one machine not included in the first sub-network; [and]
>
> storing . . . information identifying and associating each of the machines in the second sub-network;

IEEE and Hopper, taken alone or in combination, fail to disclose or render obvious at least these features of amended independent claim 1.

IEEE discloses an on-demand route acquisition system in which "nodes that do not lie on active paths *neither maintain any routing information nor participate in any periodic routing table exchanges*" (emphasis added). IEEE at p. 2, col. 1, ll. 49-51. In IEEE, a source node broadcasts a route request packet (RREQ) to its neighbors, which forward a RREQ to its neighbors, and so forth, until an intermediate node having access to the destination node is reached. IEEE, p. 2, col. 2, ll. 47-29; p. 3, col. 1, ll. 1-12; and p. 3, col. 2, ll. 12-27. Then, this node broadcasts a route reply packet (RREP) to the neighbor from which it received the RREQ, which broadcasts an RREP to the neighbor from which it received the RREQ, and so forth, until the RREP reaches the source node, thereby establishing a path from the source to the destination. IEEE, p. 3, col. 2, ll. 27-45.

IEEE, however, does not "[identify] a first sub-network of the plurality of machines that are within direct communication range of the respective machine and each other" nor "identify a second sub-network of the plurality of machines that are in direct communication range of one or more of the machines in the first sub network and each other, the second sub-network including at least one machine not included in the first sub-network," as recited by claim 1. In IEEE, a path from the source to the destination is established by blindly flooding the network with RREQ packets. *Only this path information is determined. Further, a single node does not even know the entire path but, rather, only the previous node and the next "hop" in the path.* See IEEE at p. 4, ll. 26-52. Thus, no first or second "sub-network" is identified in the manner recited by claim 1. Further, as noted above, the nodes in IEEE "do not maintain any routing information" and therefore cannot "[store] . . . information identifying and associating each of the machines in the first sub-network" or "[store] . . . information identifying and associating each of the machines in the second sub-network," as recited by claim 1.

Hopper fails to remedy the deficiencies of IEEE. Hopper discloses a system in which mobile nodes are included in a "pro-active region" of an ad-hoc network of a reference node based on whether the nodes are relatively stationary and/or have similar headings and/or speeds with respect to the reference node; there are geographic obstacles hindering communications between the reference node and the other nodes; and/or the strengths of RF communications at different locations within the environment. Hopper, col. 5, l. 27 - col. 6, l. 63; and Fig. 5. Hopper, however, fails to disclose or render obvious at least the features of claim 1 discussed above.

Independent claims 13, 26 and 38, although of a different scope than claim 1, recite features similar to those discussed above in connection with claim 1. Thus, these claims distinguish from <u>IEEE</u> and <u>Hopper</u> for at least reasons similar to those that claim 1 distinguishes from <u>IEEE</u> and <u>Hopper</u>.

Dependent claims 2-9, 11, 12, 14, 16-19, 21-24, 27-34, 36, and 37 depend from one of independent claims 1, 13, and 26. Thus, these dependent claims distinguish from <u>IEEE</u> and <u>Hopper</u> for at least reasons similar to those that independent claims 1, 13, and 26 distinguish from <u>IEEE</u> and <u>Hopper</u>.

In addition, the dependent claims recite other features that <u>IEEE</u> and <u>Hopper</u> fail to disclose or render obvious. For example, dependent claims 11 and 36 recite that the "first network table [contains] the information identifying and associating each of the machines in the first sub-network and information identifying machines in the second sub-network that are within direct communication range of machines in the first sub-network." Similarly, claims 12 and 37 further recite that "the second network table contains the information identifying and associating each of the machines in the second sub-network and information identifying machines in neither of the first and second sub-networks that are in direct communication range of machines in the second sub-network." These features are also not disclosed or rendered obvious by <u>IEEE</u> and <u>Hopper</u>. Thus, the forgoing provides an additional basis for the allowance of these claims.

III. Rejection of claims 10, 12, 15, 20, 35, and 37 as being unpatentable over IEEE, Hopper, and Computer Networks

Applicant respectfully traverses the rejection of dependent claims 10, 12, 15, 20, 35, and 37 as being unpatentable over IEEE and Hopper, and further in view of Computer Networks. These additional claims depend from one of independent claims 1, 13, and 26. As discussed above, IEEE and Hopper fail to disclose or render obvious amended independent claims 1, 13, and 26. Computer Networks fails to remedy the deficiencies of IEEE and Hopper, and the Examiner does not rely on Computer Networks for such teachings. Office Action at 9-11. Thus, these dependent claims distinguish from the prior art for at least similar reasons similar to those discussed above in connection with independent claims 1, 13, and 26.
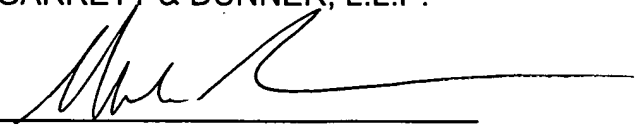
IV. Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: April 24, 2008   By:_____

Philip J. Hoffmann
Reg. No. 46,340